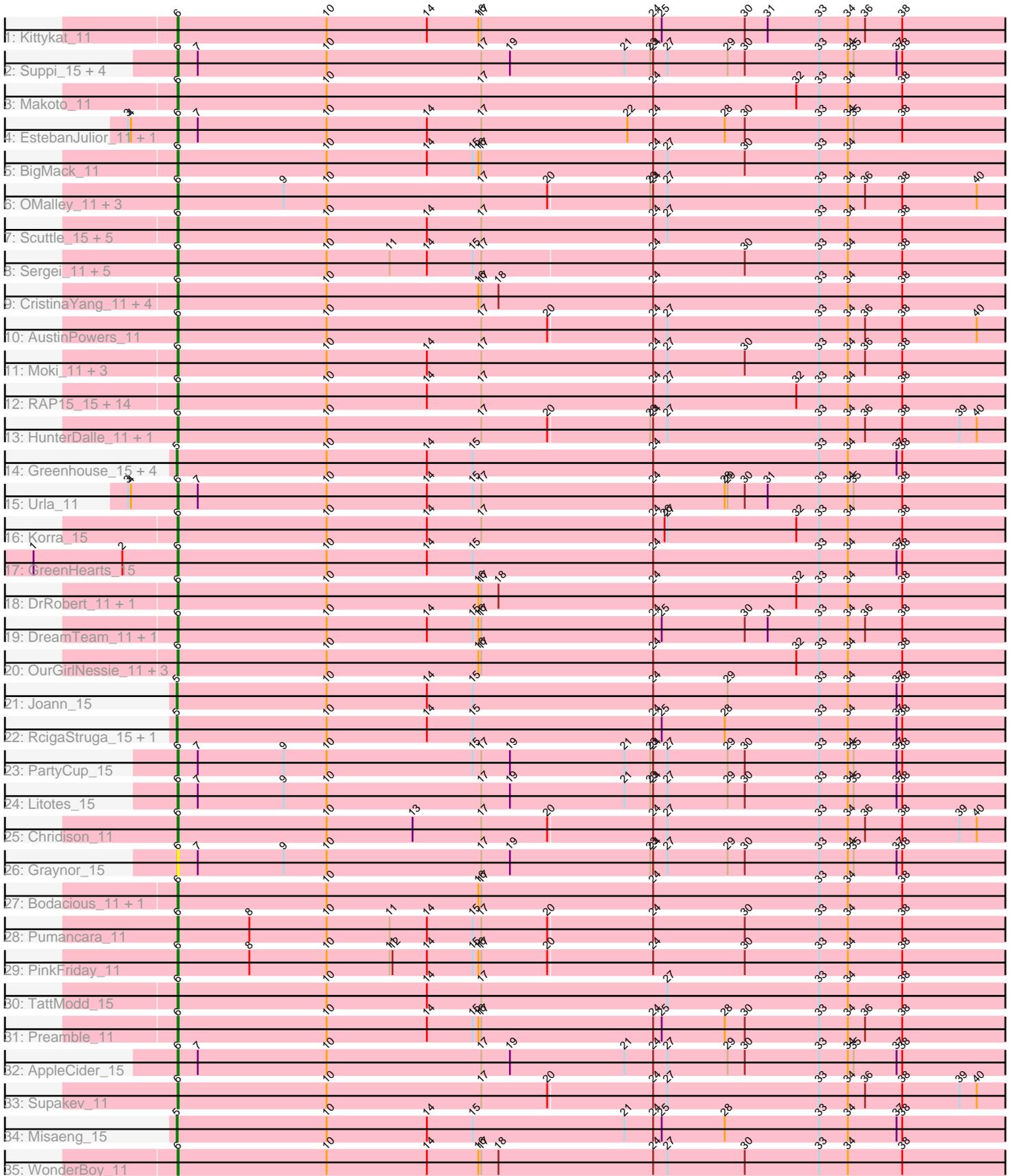# Pham 283707

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 283707 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283707 has 86 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Kittykat_11
• Track 2 : Suppi_15, Canowicakte_15, Wayne_15, MrBoss_15, CallieOMalley_15
• Track 3 : Makoto_11
• Track 4 : EstebanJulior_11, MamaPearl_11
• Track 5 : BigMack_11
• Track 6 : OMalley_11, Eunoia_11, Aledel_11, Riovina_11
• Track 7 : Scuttle_15, Carpal_15, Fluke_15, MrGloopy_15, Riverdale_15, Beethoven_15
• Track 8 : Sergei_11, KingBob_11, Herb_11, Temper16_11, Maria1952_11, Daiboju_11
• Track 9 : CristinaYang_11, Lasagna_11, LilStuart_11, Christian_11, Nancia_11
• Track 10 : AustinPowers_11
• Track 11 : Moki_11, Huckleberry_11, HeadNerd_11, Bennie_11
• Track 12 : RAP15_15, Wawa_15, Potatoes_15, Cholula_15, Dino_15, Jumboset_15, Savage2526_15, Glenn_15, Vallejo_15, Rozby_15, Immaculata_15, MeganNoll_15, Kalizoi_15, BrotherBLo_15, Zorro_15
• Track 13 : HunterDalle_11, Vulture_11
• Track 14 : Greenhouse_15, Lakshmi_15, Albanese_15, Oxynfrius_15, Nubia_15
• Track 15 : Urla_11
• Track 16 : Korra_15
• Track 17 : GreenHearts_15
• Track 18 : DrRobert_11, Pterodactyl_11
• Track 19 : DreamTeam_11, Gisselle_11
• Track 20 : OurGirlNessie_11, PitaDog_11, Lucy_11, Lennox_11
• Track 21 : Joann_15
• Track 22 : RcigaStruga_15, Huntingdon_15
• Track 23 : PartyCup_15
• Track 24 : Litotes_15
• Track 25 : Chridison_11
• Track 26 : Graynor_15
• Track 27 : Bodacious_11, ChewChew_11
• Track 28 : Pumancara_11
• Track 29 : PinkFriday_11
• Track 30 : TattModd_15
• Track 31 : Preamble_11
• Track 32 : AppleCider_15
• Track 33 : Supakev_11

• Track 34 : Misaeng_15
• Track 35 : WonderBoy_11

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 6, it was called in 75 of the 84 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aledel_11, AppleCider_15, AustinPowers_11, Beethoven_15, Bennie_11, BigMack_11, Bodacious_11, BrotherBLo_15, CallieOMalley_15, Canowicakte_15, Carpal_15, ChewChew_11, Cholula_15, Chridison_11, Christian_11, CristinaYang_11, Daiboju_11, Dino_15, DrRobert_11, DreamTeam_11, EstebanJulior_11, Eunoia_11, Fluke_15, Gisselle_11, Glenn_15, Graynor_15, GreenHearts_15, HeadNerd_11, Herb_11, Huckleberry_11, HunterDalle_11, Immaculata_15, Jumboset_15, Kalizoi_15, KingBob_11, Kittykat_11, Korra_15, Lasagna_11, Lennox_11, LilStuart_11, Litotes_15, Lucy_11, Makoto_11, MamaPearl_11, Maria1952_11, MeganNoll_15, Moki_11, MrBoss_15, MrGloopy_15, Nancia_11, OMalley_11, OurGirlNessie_11, PartyCup_15, PinkFriday_11, PitaDog_11, Potatoes_15, Preamble_11, Pterodactyl_11, Pumancara_11, RAP15_15, Riovina_11, Riverdale_15, Rozby_15, Savage2526_15, Scuttle_15, Sergei_11, Supakev_11, Suppi_15, TattModd_15, Temper16_11, Urla_11, Vallejo_15, Vulture_11, Wawa_15, Wayne_15, WonderBoy_11, Zorro_15,

Genes that have the "Most Annotated" start but do not call it:
•

Genes that do not have the "Most Annotated" start:
• Albanese_15, Greenhouse_15, Huntingdon_15, Joann_15, Lakshmi_15, Misaeng_15, Nubia_15, Oxynfrius_15, RcigaStruga_15,

Summary by start number:

Start 5:
• Found in 9 of 86 (10.5%) of genes in pham
• Manual Annotations of this start: 9 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Albanese_15 (AK), Greenhouse_15 (AK), Huntingdon_15 (AK), Joann_15 (AK), Lakshmi_15 (AK), Misaeng_15 (AK), Nubia_15 (AK), Oxynfrius_15 (AK), RcigaStruga_15 (AK),

Start 6:
• Found in 77 of 86 (89.5%) of genes in pham
• Manual Annotations of this start: 75 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aledel_11 (AK), AppleCider_15 (AK), AustinPowers_11 (AK), Beethoven_15 (AK), Bennie_11 (AK), BigMack_11 (AK), Bodacious_11 (AK), BrotherBLo_15 (AK), CallieOMalley_15 (AK), Canowicakte_15 (AK), Carpal_15 (AK), ChewChew_11 (AK), Cholula_15 (AK), Chridison_11 (AK), Christian_11 (AK), CristinaYang_11 (AK), Daiboju_11 (AK), Dino_15 (AK),

DrRobert_11 (AK), DreamTeam_11 (AK), EstebanJulior_11 (AK), Eunoia_11 (AK), Fluke_15 (AK), Gisselle_11 (AK), Glenn_15 (AK), Graynor_15 (AK), GreenHearts_15 (AK), HeadNerd_11 (AK), Herb_11 (AK), Huckleberry_11 (AK), HunterDalle_11 (AK), Immaculata_15 (AK), Jumboset_15 (AK), Kalizoi_15 (AK), KingBob_11 (AK), Kittykat_11 (AK), Korra_15 (AK), Lasagna_11 (AK), Lennox_11 (AK), LilStuart_11 (AK), Litotes_15 (AK), Lucy_11 (AK), Makoto_11 (AK), MamaPearl_11 (AK), Maria1952_11 (AK), MeganNoll_15 (AK), Moki_11 (AK), MrBoss_15 (AK), MrGloopy_15 (AK), Nancia_11 (AK), OMalley_11 (AK), OurGirlNessie_11 (AK), PartyCup_15 (AK), PinkFriday_11 (AK), PitaDog_11 (AK), Potatoes_15 (AK), Preamble_11 (AK), Pterodactyl_11 (AK), Pumancara_11 (AK), RAP15_15 (AK), Riovina_11 (AK), Riverdale_15 (AK), Rozby_15 (AK), Savage2526_15 (AK), Scuttle_15 (AK), Sergei_11 (AK), Supakev_11 (AK), Suppi_15 (AK), TattModd_15 (AK), Temper16_11 (AK), Urla_11 (AK), Vallejo_15 (AK), Vulture_11 (AK), Wawa_15 (AK), Wayne_15 (AK), WonderBoy_11 (AK), Zorro_15 (AK),

Summary by clusters:

There is one cluster represented in this pham: AK

Info for manual annotations of cluster AK:
•Start number 5 was manually annotated 9 times for cluster AK.
•Start number 6 was manually annotated 75 times for cluster AK.

Gene Information:
Gene: Albanese_15 Start: 10902, Stop: 11810, Start Num: 5
Candidate Starts for Albanese_15:
(Start: 5 @10902 has 9 MA's), (10, 11058), (14, 11163), (15, 11211), (24, 11400), (33, 11574), (34, 11604), (37, 11655), (38, 11661),

Gene: Aledel_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for Aledel_11:
(Start: 6 @7979 has 75 MA's), (9, 8090), (10, 8135), (17, 8297), (20, 8366), (23, 8471), (24, 8474), (27, 8489), (33, 8648), (34, 8678), (36, 8696), (38, 8735), (40, 8813),

Gene: AppleCider_15 Start: 10835, Stop: 11743, Start Num: 6
Candidate Starts for AppleCider_15:
(Start: 6 @10835 has 75 MA's), (7, 10856), (10, 10991), (17, 11153), (19, 11183), (21, 11303), (24, 11333), (27, 11348), (29, 11411), (30, 11429), (33, 11507), (34, 11537), (35, 11543), (37, 11588), (38, 11594),

Gene: AustinPowers_11 Start: 7980, Stop: 8885, Start Num: 6
Candidate Starts for AustinPowers_11:
(Start: 6 @7980 has 75 MA's), (10, 8136), (17, 8298), (20, 8367), (24, 8475), (27, 8490), (33, 8649), (34, 8679), (36, 8697), (38, 8736), (40, 8814),

Gene: Beethoven_15 Start: 10796, Stop: 11704, Start Num: 6
Candidate Starts for Beethoven_15:
(Start: 6 @10796 has 75 MA's), (10, 10952), (14, 11057), (17, 11114), (24, 11294), (27, 11309), (33, 11468), (34, 11498), (38, 11555),

Gene: Bennie_11 Start: 7938, Stop: 8846, Start Num: 6
Candidate Starts for Bennie_11:
(Start: 6 @7938 has 75 MA's), (10, 8094), (14, 8199), (17, 8256), (24, 8436), (27, 8451), (30, 8532), (33, 8610), (34, 8640), (36, 8658), (38, 8697),

Gene: BigMack_11 Start: 7938, Stop: 8846, Start Num: 6
Candidate Starts for BigMack_11:
(Start: 6 @7938 has 75 MA's), (10, 8094), (14, 8199), (15, 8247), (16, 8253), (17, 8256), (24, 8436), (27, 8451), (30, 8532), (33, 8610), (34, 8640),

Gene: Bodacious_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for Bodacious_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (24, 8434), (33, 8608), (34, 8638), (38, 8695),

Gene: BrotherBLo_15 Start: 10803, Stop: 11711, Start Num: 6
Candidate Starts for BrotherBLo_15:
(Start: 6 @10803 has 75 MA's), (10, 10959), (14, 11064), (17, 11121), (24, 11301), (27, 11316), (32, 11451), (33, 11475), (34, 11505), (38, 11562),

Gene: CallieOMalley_15 Start: 10835, Stop: 11743, Start Num: 6
Candidate Starts for CallieOMalley_15:
(Start: 6 @10835 has 75 MA's), (7, 10856), (10, 10991), (17, 11153), (19, 11183), (21, 11303), (23, 11330), (24, 11333), (27, 11348), (29, 11411), (30, 11429), (33, 11507), (34, 11537), (35, 11543), (37, 11588), (38, 11594),

Gene: Canowicakte_15 Start: 10870, Stop: 11778, Start Num: 6
Candidate Starts for Canowicakte_15:
(Start: 6 @10870 has 75 MA's), (7, 10891), (10, 11026), (17, 11188), (19, 11218), (21, 11338), (23, 11365), (24, 11368), (27, 11383), (29, 11446), (30, 11464), (33, 11542), (34, 11572), (35, 11578), (37, 11623), (38, 11629),

Gene: Carpal_15 Start: 10803, Stop: 11711, Start Num: 6
Candidate Starts for Carpal_15:
(Start: 6 @10803 has 75 MA's), (10, 10959), (14, 11064), (17, 11121), (24, 11301), (27, 11316), (33, 11475), (34, 11505), (38, 11562),

Gene: ChewChew_11 Start: 7935, Stop: 8843, Start Num: 6
Candidate Starts for ChewChew_11:
(Start: 6 @7935 has 75 MA's), (10, 8091), (16, 8250), (17, 8253), (24, 8433), (33, 8607), (34, 8637), (38, 8694),

Gene: Cholula_15 Start: 10848, Stop: 11756, Start Num: 6
Candidate Starts for Cholula_15:
(Start: 6 @10848 has 75 MA's), (10, 11004), (14, 11109), (17, 11166), (24, 11346), (27, 11361), (32, 11496), (33, 11520), (34, 11550), (38, 11607),

Gene: Chridison_11 Start: 7980, Stop: 8885, Start Num: 6
Candidate Starts for Chridison_11:
(Start: 6 @7980 has 75 MA's), (10, 8136), (13, 8226), (17, 8298), (20, 8367), (24, 8475), (27, 8490), (33, 8649), (34, 8679), (36, 8697), (38, 8736), (39, 8796), (40, 8814),

Gene: Christian_11 Start: 7936, Stop: 8844, Start Num: 6

Candidate Starts for Christian_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (33, 8608), (34, 8638), (38, 8695),

Gene: CristinaYang_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for CristinaYang_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (33, 8608), (34, 8638), (38, 8695),

Gene: Daiboju_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for Daiboju_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (11, 8203), (14, 8242), (15, 8290), (17, 8299), (24, 8476), (30, 8572), (33, 8650), (34, 8680), (38, 8737),

Gene: Dino_15 Start: 10802, Stop: 11710, Start Num: 6
Candidate Starts for Dino_15:
(Start: 6 @10802 has 75 MA's), (10, 10958), (14, 11063), (17, 11120), (24, 11300), (27, 11315), (32, 11450), (33, 11474), (34, 11504), (38, 11561),

Gene: DrRobert_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for DrRobert_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (32, 8584), (33, 8608), (34, 8638), (38, 8695),

Gene: DreamTeam_11 Start: 8003, Stop: 8911, Start Num: 6
Candidate Starts for DreamTeam_11:
(Start: 6 @8003 has 75 MA's), (10, 8159), (14, 8264), (15, 8312), (16, 8318), (17, 8321), (24, 8501), (25, 8510), (30, 8597), (31, 8621), (33, 8675), (34, 8705), (36, 8723), (38, 8762),

Gene: EstebanJulior_11 Start: 7982, Stop: 8890, Start Num: 6
Candidate Starts for EstebanJulior_11:
(3, 7931), (4, 7934), (Start: 6 @7982 has 75 MA's), (7, 8003), (10, 8138), (14, 8243), (17, 8300), (22, 8453), (24, 8480), (28, 8555), (30, 8576), (33, 8654), (34, 8684), (35, 8690), (38, 8741),

Gene: Eunoia_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for Eunoia_11:
(Start: 6 @7979 has 75 MA's), (9, 8090), (10, 8135), (17, 8297), (20, 8366), (23, 8471), (24, 8474), (27, 8489), (33, 8648), (34, 8678), (36, 8696), (38, 8735), (40, 8813),

Gene: Fluke_15 Start: 10844, Stop: 11752, Start Num: 6
Candidate Starts for Fluke_15:
(Start: 6 @10844 has 75 MA's), (10, 11000), (14, 11105), (17, 11162), (24, 11342), (27, 11357), (33, 11516), (34, 11546), (38, 11603),

Gene: Gisselle_11 Start: 8003, Stop: 8911, Start Num: 6
Candidate Starts for Gisselle_11:
(Start: 6 @8003 has 75 MA's), (10, 8159), (14, 8264), (15, 8312), (16, 8318), (17, 8321), (24, 8501), (25, 8510), (30, 8597), (31, 8621), (33, 8675), (34, 8705), (36, 8723), (38, 8762),

Gene: Glenn_15 Start: 10854, Stop: 11762, Start Num: 6
Candidate Starts for Glenn_15:
(Start: 6 @10854 has 75 MA's), (10, 11010), (14, 11115), (17, 11172), (24, 11352), (27, 11367), (32, 11502), (33, 11526), (34, 11556), (38, 11613),

Gene: Graynor_15 Start: 10856, Stop: 11764, Start Num: 6
Candidate Starts for Graynor_15:
(Start: 6 @10856 has 75 MA's), (7, 10877), (9, 10967), (10, 11012), (17, 11174), (19, 11204), (23, 11351), (24, 11354), (27, 11369), (29, 11432), (30, 11450), (33, 11528), (34, 11558), (35, 11564), (37, 11609), (38, 11615),

Gene: GreenHearts_15 Start: 10949, Stop: 11857, Start Num: 6
Candidate Starts for GreenHearts_15:
(1, 10799), (2, 10892), (Start: 6 @10949 has 75 MA's), (10, 11105), (14, 11210), (15, 11258), (24, 11447), (33, 11621), (34, 11651), (37, 11702), (38, 11708),

Gene: Greenhouse_15 Start: 10873, Stop: 11781, Start Num: 5
Candidate Starts for Greenhouse_15:
(Start: 5 @10873 has 9 MA's), (10, 11029), (14, 11134), (15, 11182), (24, 11371), (33, 11545), (34, 11575), (37, 11626), (38, 11632),

Gene: HeadNerd_11 Start: 7938, Stop: 8846, Start Num: 6
Candidate Starts for HeadNerd_11:
(Start: 6 @7938 has 75 MA's), (10, 8094), (14, 8199), (17, 8256), (24, 8436), (27, 8451), (30, 8532), (33, 8610), (34, 8640), (36, 8658), (38, 8697),

Gene: Herb_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for Herb_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (11, 8203), (14, 8242), (15, 8290), (17, 8299), (24, 8476), (30, 8572), (33, 8650), (34, 8680), (38, 8737),

Gene: Huckleberry_11 Start: 7938, Stop: 8846, Start Num: 6
Candidate Starts for Huckleberry_11:
(Start: 6 @7938 has 75 MA's), (10, 8094), (14, 8199), (17, 8256), (24, 8436), (27, 8451), (30, 8532), (33, 8610), (34, 8640), (36, 8658), (38, 8697),

Gene: HunterDalle_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for HunterDalle_11:
(Start: 6 @7979 has 75 MA's), (10, 8135), (17, 8297), (20, 8366), (23, 8471), (24, 8474), (27, 8489), (33, 8648), (34, 8678), (36, 8696), (38, 8735), (39, 8795), (40, 8813),

Gene: Huntingdon_15 Start: 10859, Stop: 11767, Start Num: 5
Candidate Starts for Huntingdon_15:
(Start: 5 @10859 has 9 MA's), (10, 11015), (14, 11120), (15, 11168), (24, 11357), (25, 11366), (28, 11432), (33, 11531), (34, 11561), (37, 11612), (38, 11618),

Gene: Immaculata_15 Start: 10848, Stop: 11756, Start Num: 6
Candidate Starts for Immaculata_15:
(Start: 6 @10848 has 75 MA's), (10, 11004), (14, 11109), (17, 11166), (24, 11346), (27, 11361), (32, 11496), (33, 11520), (34, 11550), (38, 11607),

Gene: Joann_15 Start: 10851, Stop: 11759, Start Num: 5
Candidate Starts for Joann_15:
(Start: 5 @10851 has 9 MA's), (10, 11007), (14, 11112), (15, 11160), (24, 11349), (29, 11427), (33, 11523), (34, 11553), (37, 11604), (38, 11610),

Gene: Jumboset_15 Start: 10797, Stop: 11705, Start Num: 6

Candidate Starts for Jumboset_15:
(Start: 6 @10797 has 75 MA's), (10, 10953), (14, 11058), (17, 11115), (24, 11295), (27, 11310), (32, 11445), (33, 11469), (34, 11499), (38, 11556),

Gene: Kalizoi_15 Start: 10796, Stop: 11704, Start Num: 6
Candidate Starts for Kalizoi_15:
(Start: 6 @10796 has 75 MA's), (10, 10952), (14, 11057), (17, 11114), (24, 11294), (27, 11309), (32, 11444), (33, 11468), (34, 11498), (38, 11555),

Gene: KingBob_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for KingBob_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (11, 8203), (14, 8242), (15, 8290), (17, 8299), (24, 8476), (30, 8572), (33, 8650), (34, 8680), (38, 8737),

Gene: Kittykat_11 Start: 7979, Stop: 8887, Start Num: 6
Candidate Starts for Kittykat_11:
(Start: 6 @7979 has 75 MA's), (10, 8135), (14, 8240), (16, 8294), (17, 8297), (24, 8477), (25, 8486), (30, 8573), (31, 8597), (33, 8651), (34, 8681), (36, 8699), (38, 8738),

Gene: Korra_15 Start: 10802, Stop: 11710, Start Num: 6
Candidate Starts for Korra_15:
(Start: 6 @10802 has 75 MA's), (10, 10958), (14, 11063), (17, 11120), (24, 11300), (26, 11312), (27, 11315), (32, 11450), (33, 11474), (34, 11504), (38, 11561),

Gene: Lakshmi_15 Start: 10878, Stop: 11786, Start Num: 5
Candidate Starts for Lakshmi_15:
(Start: 5 @10878 has 9 MA's), (10, 11034), (14, 11139), (15, 11187), (24, 11376), (33, 11550), (34, 11580), (37, 11631), (38, 11637),

Gene: Lasagna_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for Lasagna_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (33, 8608), (34, 8638), (38, 8695),

Gene: Lennox_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for Lennox_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (24, 8434), (32, 8584), (33, 8608), (34, 8638), (38, 8695),

Gene: LilStuart_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for LilStuart_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (33, 8608), (34, 8638), (38, 8695),

Gene: Litotes_15 Start: 10820, Stop: 11728, Start Num: 6
Candidate Starts for Litotes_15:
(Start: 6 @10820 has 75 MA's), (7, 10841), (9, 10931), (10, 10976), (17, 11138), (19, 11168), (21, 11288), (23, 11315), (24, 11318), (27, 11333), (29, 11396), (30, 11414), (33, 11492), (34, 11522), (35, 11528), (37, 11573), (38, 11579),

Gene: Lucy_11 Start: 7927, Stop: 8835, Start Num: 6
Candidate Starts for Lucy_11:

(Start: 6 @7927 has 75 MA's), (10, 8083), (16, 8242), (17, 8245), (24, 8425), (32, 8575), (33, 8599), (34, 8629), (38, 8686),

Gene: Makoto_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for Makoto_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (17, 8254), (24, 8434), (32, 8584), (33, 8608), (34, 8638), (38, 8695),

Gene: MamaPearl_11 Start: 7982, Stop: 8890, Start Num: 6
Candidate Starts for MamaPearl_11:
(3, 7931), (4, 7934), (Start: 6 @7982 has 75 MA's), (7, 8003), (10, 8138), (14, 8243), (17, 8300), (22, 8453), (24, 8480), (28, 8555), (30, 8576), (33, 8654), (34, 8684), (35, 8690), (38, 8741),

Gene: Maria1952_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for Maria1952_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (11, 8203), (14, 8242), (15, 8290), (17, 8299), (24, 8476), (30, 8572), (33, 8650), (34, 8680), (38, 8737),

Gene: MeganNoll_15 Start: 10854, Stop: 11762, Start Num: 6
Candidate Starts for MeganNoll_15:
(Start: 6 @10854 has 75 MA's), (10, 11010), (14, 11115), (17, 11172), (24, 11352), (27, 11367), (32, 11502), (33, 11526), (34, 11556), (38, 11613),

Gene: Misaeng_15 Start: 10924, Stop: 11832, Start Num: 5
Candidate Starts for Misaeng_15:
(Start: 5 @10924 has 9 MA's), (10, 11080), (14, 11185), (15, 11233), (21, 11392), (24, 11422), (25, 11431), (28, 11497), (33, 11596), (34, 11626), (37, 11677), (38, 11683),

Gene: Moki_11 Start: 7938, Stop: 8846, Start Num: 6
Candidate Starts for Moki_11:
(Start: 6 @7938 has 75 MA's), (10, 8094), (14, 8199), (17, 8256), (24, 8436), (27, 8451), (30, 8532), (33, 8610), (34, 8640), (36, 8658), (38, 8697),

Gene: MrBoss_15 Start: 10820, Stop: 11728, Start Num: 6
Candidate Starts for MrBoss_15:
(Start: 6 @10820 has 75 MA's), (7, 10841), (10, 10976), (17, 11138), (19, 11168), (21, 11288), (23, 11315), (24, 11318), (27, 11333), (29, 11396), (30, 11414), (33, 11492), (34, 11522), (35, 11528), (37, 11573), (38, 11579),

Gene: MrGloopy_15 Start: 10787, Stop: 11695, Start Num: 6
Candidate Starts for MrGloopy_15:
(Start: 6 @10787 has 75 MA's), (10, 10943), (14, 11048), (17, 11105), (24, 11285), (27, 11300), (33, 11459), (34, 11489), (38, 11546),

Gene: Nancia_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for Nancia_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (33, 8608), (34, 8638), (38, 8695),

Gene: Nubia_15 Start: 10838, Stop: 11746, Start Num: 5
Candidate Starts for Nubia_15:
(Start: 5 @10838 has 9 MA's), (10, 10994), (14, 11099), (15, 11147), (24, 11336), (33, 11510), (34, 11540), (37, 11591), (38, 11597),

Gene: OMalley_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for OMalley_11:
(Start: 6 @7979 has 75 MA's), (9, 8090), (10, 8135), (17, 8297), (20, 8366), (23, 8471), (24, 8474), (27, 8489), (33, 8648), (34, 8678), (36, 8696), (38, 8735), (40, 8813),

Gene: OurGirlNessie_11 Start: 7927, Stop: 8835, Start Num: 6
Candidate Starts for OurGirlNessie_11:
(Start: 6 @7927 has 75 MA's), (10, 8083), (16, 8242), (17, 8245), (24, 8425), (32, 8575), (33, 8599), (34, 8629), (38, 8686),

Gene: Oxynfrius_15 Start: 10851, Stop: 11759, Start Num: 5
Candidate Starts for Oxynfrius_15:
(Start: 5 @10851 has 9 MA's), (10, 11007), (14, 11112), (15, 11160), (24, 11349), (33, 11523), (34, 11553), (37, 11604), (38, 11610),

Gene: PartyCup_15 Start: 10867, Stop: 11775, Start Num: 6
Candidate Starts for PartyCup_15:
(Start: 6 @10867 has 75 MA's), (7, 10888), (9, 10978), (10, 11023), (15, 11176), (17, 11185), (19, 11215), (21, 11335), (23, 11362), (24, 11365), (27, 11380), (29, 11443), (30, 11461), (33, 11539), (34, 11569), (35, 11575), (37, 11620), (38, 11626),

Gene: PinkFriday_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for PinkFriday_11:
(Start: 6 @7979 has 75 MA's), (8, 8054), (10, 8135), (11, 8201), (12, 8204), (14, 8240), (15, 8288), (16, 8294), (17, 8297), (20, 8366), (24, 8474), (30, 8570), (33, 8648), (34, 8678), (38, 8735),

Gene: PitaDog_11 Start: 7927, Stop: 8835, Start Num: 6
Candidate Starts for PitaDog_11:
(Start: 6 @7927 has 75 MA's), (10, 8083), (16, 8242), (17, 8245), (24, 8425), (32, 8575), (33, 8599), (34, 8629), (38, 8686),

Gene: Potatoes_15 Start: 10848, Stop: 11756, Start Num: 6
Candidate Starts for Potatoes_15:
(Start: 6 @10848 has 75 MA's), (10, 11004), (14, 11109), (17, 11166), (24, 11346), (27, 11361), (32, 11496), (33, 11520), (34, 11550), (38, 11607),

Gene: Preamble_11 Start: 7937, Stop: 8845, Start Num: 6
Candidate Starts for Preamble_11:
(Start: 6 @7937 has 75 MA's), (10, 8093), (14, 8198), (15, 8246), (16, 8252), (17, 8255), (24, 8435), (25, 8444), (28, 8510), (30, 8531), (33, 8609), (34, 8639), (36, 8657), (38, 8696),

Gene: Pterodactyl_11 Start: 7928, Stop: 8836, Start Num: 6
Candidate Starts for Pterodactyl_11:
(Start: 6 @7928 has 75 MA's), (10, 8084), (16, 8243), (17, 8246), (18, 8264), (24, 8426), (32, 8576), (33, 8600), (34, 8630), (38, 8687),

Gene: Pumancara_11 Start: 7978, Stop: 8883, Start Num: 6
Candidate Starts for Pumancara_11:
(Start: 6 @7978 has 75 MA's), (8, 8053), (10, 8134), (11, 8200), (14, 8239), (15, 8287), (17, 8296), (20, 8365), (24, 8473), (30, 8569), (33, 8647), (34, 8677), (38, 8734),

Gene: RAP15_15 Start: 10854, Stop: 11762, Start Num: 6

Candidate Starts for RAP15_15:
(Start: 6 @10854 has 75 MA's), (10, 11010), (14, 11115), (17, 11172), (24, 11352), (27, 11367), (32, 11502), (33, 11526), (34, 11556), (38, 11613),

Gene: RcigaStruga_15 Start: 10859, Stop: 11767, Start Num: 5
Candidate Starts for RcigaStruga_15:
(Start: 5 @10859 has 9 MA's), (10, 11015), (14, 11120), (15, 11168), (24, 11357), (25, 11366), (28, 11432), (33, 11531), (34, 11561), (37, 11612), (38, 11618),

Gene: Riovina_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for Riovina_11:
(Start: 6 @7979 has 75 MA's), (9, 8090), (10, 8135), (17, 8297), (20, 8366), (23, 8471), (24, 8474), (27, 8489), (33, 8648), (34, 8678), (36, 8696), (38, 8735), (40, 8813),

Gene: Riverdale_15 Start: 10785, Stop: 11693, Start Num: 6
Candidate Starts for Riverdale_15:
(Start: 6 @10785 has 75 MA's), (10, 10941), (14, 11046), (17, 11103), (24, 11283), (27, 11298), (33, 11457), (34, 11487), (38, 11544),

Gene: Rozby_15 Start: 10785, Stop: 11693, Start Num: 6
Candidate Starts for Rozby_15:
(Start: 6 @10785 has 75 MA's), (10, 10941), (14, 11046), (17, 11103), (24, 11283), (27, 11298), (32, 11433), (33, 11457), (34, 11487), (38, 11544),

Gene: Savage2526_15 Start: 10848, Stop: 11756, Start Num: 6
Candidate Starts for Savage2526_15:
(Start: 6 @10848 has 75 MA's), (10, 11004), (14, 11109), (17, 11166), (24, 11346), (27, 11361), (32, 11496), (33, 11520), (34, 11550), (38, 11607),

Gene: Scuttle_15 Start: 10854, Stop: 11762, Start Num: 6
Candidate Starts for Scuttle_15:
(Start: 6 @10854 has 75 MA's), (10, 11010), (14, 11115), (17, 11172), (24, 11352), (27, 11367), (33, 11526), (34, 11556), (38, 11613),

Gene: Sergei_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for Sergei_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (11, 8203), (14, 8242), (15, 8290), (17, 8299), (24, 8476), (30, 8572), (33, 8650), (34, 8680), (38, 8737),

Gene: Supakev_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for Supakev_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (17, 8299), (20, 8368), (24, 8476), (27, 8491), (33, 8650), (34, 8680), (36, 8698), (38, 8737), (39, 8797), (40, 8815),

Gene: Suppi_15 Start: 10870, Stop: 11778, Start Num: 6
Candidate Starts for Suppi_15:
(Start: 6 @10870 has 75 MA's), (7, 10891), (10, 11026), (17, 11188), (19, 11218), (21, 11338), (23, 11365), (24, 11368), (27, 11383), (29, 11446), (30, 11464), (33, 11542), (34, 11572), (35, 11578), (37, 11623), (38, 11629),

Gene: TattModd_15 Start: 10848, Stop: 11756, Start Num: 6
Candidate Starts for TattModd_15:

(Start: 6 @10848 has 75 MA's), (10, 11004), (14, 11109), (17, 11166), (27, 11361), (33, 11520), (34, 11550), (38, 11607),

Gene: Temper16_11 Start: 7981, Stop: 8886, Start Num: 6
Candidate Starts for Temper16_11:
(Start: 6 @7981 has 75 MA's), (10, 8137), (11, 8203), (14, 8242), (15, 8290), (17, 8299), (24, 8476), (30, 8572), (33, 8650), (34, 8680), (38, 8737),

Gene: Urla_11 Start: 7985, Stop: 8893, Start Num: 6
Candidate Starts for Urla_11:
(3, 7934), (4, 7937), (Start: 6 @7985 has 75 MA's), (7, 8006), (10, 8141), (14, 8246), (15, 8294), (17, 8303), (24, 8483), (28, 8558), (29, 8561), (30, 8579), (31, 8603), (33, 8657), (34, 8687), (35, 8693), (38, 8744),

Gene: Vallejo_15 Start: 10786, Stop: 11694, Start Num: 6
Candidate Starts for Vallejo_15:
(Start: 6 @10786 has 75 MA's), (10, 10942), (14, 11047), (17, 11104), (24, 11284), (27, 11299), (32, 11434), (33, 11458), (34, 11488), (38, 11545),

Gene: Vulture_11 Start: 7979, Stop: 8884, Start Num: 6
Candidate Starts for Vulture_11:
(Start: 6 @7979 has 75 MA's), (10, 8135), (17, 8297), (20, 8366), (23, 8471), (24, 8474), (27, 8489), (33, 8648), (34, 8678), (36, 8696), (38, 8735), (39, 8795), (40, 8813),

Gene: Wawa_15 Start: 10823, Stop: 11731, Start Num: 6
Candidate Starts for Wawa_15:
(Start: 6 @10823 has 75 MA's), (10, 10979), (14, 11084), (17, 11141), (24, 11321), (27, 11336), (32, 11471), (33, 11495), (34, 11525), (38, 11582),

Gene: Wayne_15 Start: 10916, Stop: 11824, Start Num: 6
Candidate Starts for Wayne_15:
(Start: 6 @10916 has 75 MA's), (7, 10937), (10, 11072), (17, 11234), (19, 11264), (21, 11384), (23, 11411), (24, 11414), (27, 11429), (29, 11492), (30, 11510), (33, 11588), (34, 11618), (35, 11624), (37, 11669), (38, 11675),

Gene: WonderBoy_11 Start: 7936, Stop: 8844, Start Num: 6
Candidate Starts for WonderBoy_11:
(Start: 6 @7936 has 75 MA's), (10, 8092), (14, 8197), (16, 8251), (17, 8254), (18, 8272), (24, 8434), (27, 8449), (30, 8530), (33, 8608), (34, 8638), (38, 8695),

Gene: Zorro_15 Start: 10802, Stop: 11710, Start Num: 6
Candidate Starts for Zorro_15:
(Start: 6 @10802 has 75 MA's), (10, 10958), (14, 11063), (17, 11120), (24, 11300), (27, 11315), (32, 11450), (33, 11474), (34, 11504), (38, 11561),